

## CLAIMS

1. A device (1) for controlling equipment management  
5 data (5) in a communications network comprising a network  
management system capable of managing the said equipment  
using previously loaded management data modules, associated  
with the said equipment and stored in a memory (9),  
characterised in that it comprises control means (10)  
10 arranged, when there is a request by the said system to  
take over at least one new item of equipment (5) in the  
said network, to extract from the said memory (9) the  
management data module associated with each new item of  
equipment, and then to load into the said system each new  
15 management data module extracted, dynamically, so that the  
management by the said system of the other items of  
equipment (5) in the said network is not interrupted.

2. A device according to Claim 1, characterised in that  
20 the said control means (10) are arranged, whenever a new  
management data module is loaded, associated with a new  
version of an item of equipment (5) which has not yet been  
integrated in the network whilst an "old" management data  
module associated with a prior version of this equipment  
25 (5) is still loaded and the said prior version is still  
integrated in the said network, i) to put the said new  
management data module loaded on standby so as to continue  
the management of the said old version of the equipment  
from the said old associated loaded module, until the said  
30 new version of the equipment (5) is integrated, and then  
ii), when data indicating the integration of the said new

version are received, to put the said new module loaded into service so as to provide the management of the new version of the equipment (5) from this new management data module.

5

3. A device according to Claim 2, characterised in that the said putting on standby consists firstly of allowing the management of the new version of the equipment (5) from the said new management data module, without taking account  
10 of any error messages related to its non-integration in the said network, and secondly to send to the said old management data module a message indicating to it that a change of version is under way and that it must not take account of at least some of the error messages related to  
15 the conjoint management of the old and new versions.

4. A device according to Claim 2, characterised in that the said control means (10) are arranged, in the case of synchronisation between the said new equipment version (5)  
20 and the said new management data module, so as to delete the said old management data module.

5. A device according to Claim 1, characterised in that the said control means (10) are arranged to load management  
25 data modules according to at least a first mode in which the said modules are loaded independently of any dependencies between them and a second mode in which, in loading the said modules, account is taken of any dependencies between them.

30

6. A device according to Claim 1, characterised in that each management data module consists of at least one descriptor.

5        7. A device according to Claim 6, characterised in that each descriptor consists of at least one program code file and at least one configuration file.

8. A device according to Claim 7, characterised in that  
10 one of the said program code files of a descriptor comprises first data designating a type to which an item of network equipment belongs, and another of the said program code files of the said descriptor comprises second data designating a management information base definition  
15 associated with the said equipment (5) and accessible to the said system.

9. A device according to Claim 7, characterised in that the said program codes are in Java language.

20

10.A management server (2) in a communications network, comprising management means (3) able to manage network equipment (5) using loaded management data modules, associated with the said network equipment (5) and stored  
25 in a memory (9), characterised in that it comprises a management device (1) according to one of the preceding claims, coupled to the said management means.

11.A method of controlling equipment management data  
30 (5) in a communications network, in which the said network

equipment is managed using loaded management data modules, associated with the said network equipment (5), characterised in that, in the case of a request to take over at least one new item of equipment (5) in the said  
5 network, each new management data module associated with a new item of equipment (5) is loaded dynamically so that the management of the other equipment (5) in the said network is not interrupted.

10 12.A method according to Claim 11, characterised in that, in the case of the loading of a new management data module associated with a new version of an item of equipment (5) not yet integrated in the said network whilst an "old" management data module associated with a prior  
15 version of this equipment (5) is still loaded and the said prior version is still integrated in the said network, i) the said new management data module loaded is put on standby so as to continue the management of the said old version of the equipment (5) using the said associated old  
20 module loaded, until the said new version of the equipment (5) is integrated, and then ii), on receiving data signalling the integration of the said new version, the said new management data module loaded is brought into service so as to provide the management of the new version  
25 of equipment (5) using this new management data module.

13.A method according to Claim 12, characterised in that the said putting on standby consists firstly of allowing the management of the new version of the equipment  
30 (5) using the said associated new management data module without taking account of any error messages related to its

non-integration in the said network, and secondly of sending to the said old management data module a message signalling to it that a change of version is under way and that it must not take account of at least some of the error  
5 messages related to the conjoint management of the said old and new versions.

14.A method according to Claim 12, characterised in that, in the case of synchronisation between the said new  
10 equipment version (5) and the said new management data module, the said old management data module is deleted.

15.A method according to Claim 11, characterised in that the management data modules are loaded independently  
15 of any dependencies thereof or taking account of any dependencies thereof.

16.A method according to Claim 12, characterised in that each management data module consists of at least one  
20 descriptor.

17.A method according to Claim 16, characterised in that each descriptor consists of at least one program code file and at least one configuration file.  
25

18.A method according to Claim 17, characterised in that one of the said program code files of the descriptor comprises first data designating a type to which an item of equipment in the network belongs, and another of the said  
30 program code files of the said descriptor comprises second

data designating a management information base definition associated with the said equipment (5) and accessible.

19.A method according to Claim 19, characterised in  
5 that the said program codes are in Java language.

20.Use of the method, control device (1) and management server (2) according to one of the preceding claims in the network technologies which are to be managed.

10

21.Use according to Claim 20, characterised in that the said network technologies are chosen from a group comprising the transmission networks, in particular of the WDM, SONET and SDH type, data networks, in particular of  
15 the Internet-IP and ATM type, and voice networks, in particular of the conventional, mobile and NGN type.